HIV and AIDS

Disease Information Packets – Slide Sets



Public Health Services,
Community Health Statistics
8/2010



What is HIV?

- Human immunodeficiency virus (HIV) is a virus that attacks the human immune system by destroying white blood cells.
 - It prevents the body from fighting off infection and disease.





What is AIDS?

- Acquired Immune Deficiency Syndrome (AIDS) is an advanced stage of HIV infection, meaning that an individual's immune system has been weakened to a point where it is difficult to fight infections.
 - Either the white blood cell count falls below a certain level or a person with HIV develops certain cancers or infections.





How is HIV transmitted?

- The HIV virus is found in:
 - Blood
 - Semen
 - Pre-seminal fluid
 - Vaginal fluid
 - Breast milk
- HIV can be transmitted through:
 - Oral, anal, or vaginal sex with an infected individual
 - Sharing needles or syringes with an infected person
 - Exposure before or during birth
 - Breast feeding





Demographic Risk Factors

Gender

 In 2006, males accounted for 73% of all HIV diagnoses.

Age

- Those under the age of 40 are more likely to become infected with the HIV virus.
- More than half (53%) of new HIV cases where those aged 25-44 years of age, in 2006.

Race/Ethnicity

- Blacks and Hispanics are disproportionately diagnosed.
- In 2006, Blacks and Hispanic accounted for 45% and 18% of new HIV infections, respectively.





Social and Behavioral Risk Factors

Risky Sexual Behavior

- High risk sexual contact, such as unprotected sex, increases the risk of becoming infected with the HIV virus.
- Men who have sex with men (MSM) accounted for the largest number of HIV diagnoses overall in 2006.
- Among females, most HIV diagnoses occurred in those exposed through high risk heterosexual contact.

Injection Drug Use / Needle Sharing

-Sharing needles with an HIV infected person increases the risk of contracting the virus.

–In 2006, 12% of all new HIV infections were due to intravenous drug use.





Intermediate Outcomes

- HIV/AIDS increases the risk of other diseases and is accompanied by complications. Some of these include:
 - Wasting Syndrome
 - Causes the involuntary loss of more than 10% of a person's body weight and muscle
 - Candidiasis (Thrush)
 - Pneumonia
 - Tuberculosis (TB)
 - Invasive Cervical Cancer
 - Dementia
 - Oral Health
 - HIV infection can make a person more so cavities, and dry mouth.
 - Hepatitis C
 - 50% to 90% of HIV infected intravenous drug users are also infected with Hepatitis C.
 - Kidney Disease, as a complication
 - Body Fat Changes Lipodystrophy, as a complication
 - · Causes individuals to gain fat in the neck, abdomen, breasts, and face





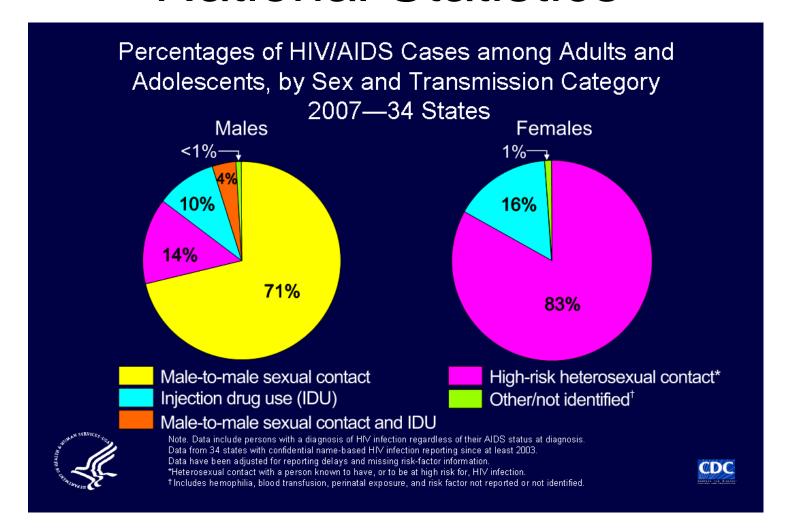
National Statistics

- In 2006, an estimated 1.1 million Americans were living with HIV infection, with 21% undiagnosed.
- Over 56,000 new cases of HIV infections were reported in the United States in 2006.
- In 2007, nearly 37,000
 Americans were diagnosed with AIDS.





National Statistics





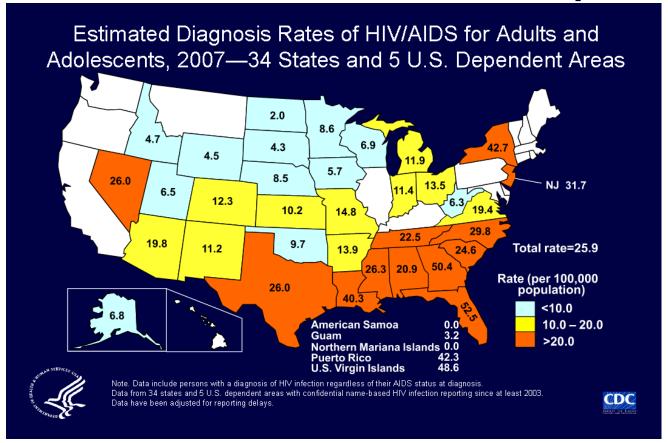
National Statistics and Disparities

- The number of newly diagnosed HIV infections was 7 times higher in Black Americans than in white Americans in 2006.
- The number of newly diagnosed HIV infections was nearly 3 times higher in Hispanic Americans than in white Americans in 2006.
- In 2006, men accounted for nearly 3 out of every 4 cases of HIV infection.
- In 2005, 41% of men living with HIV and 65% of women living with HIV were Black.





National Statistics and Disparities



The South-Eastern region of the United States had the highest reported diagnosis rates of HIV/AIDS for adults and adolescents in 2007.



Costs

- In 2008, the United States federal government spent over \$17 billion dollars on HIV/AIDS.
 - This includes direct medical costs, prevention programs, and indirect service programs.





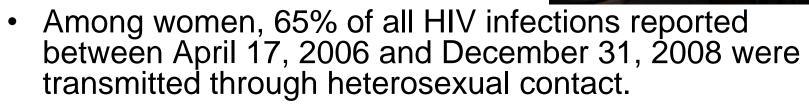
Local Statistics

 Between April 17, 2006 and December 31, 2008, a total of 3,847 new HIV infections were reported in San Diego County.

In 2008, a total of 391 cases of AIDS were reported in

San Diego County.

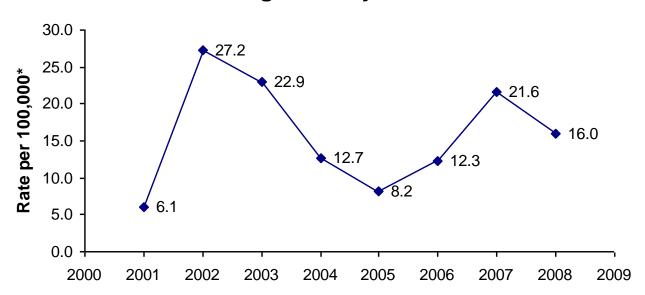
Among males, 83% of all new HIV infections reported between April 17, 2006 and December 31, 2008 occurred in men who have sex with men (MSM).





Local Statistics

HIV Infection Rates* by Year of Case Report, San Diego County 2000-2008

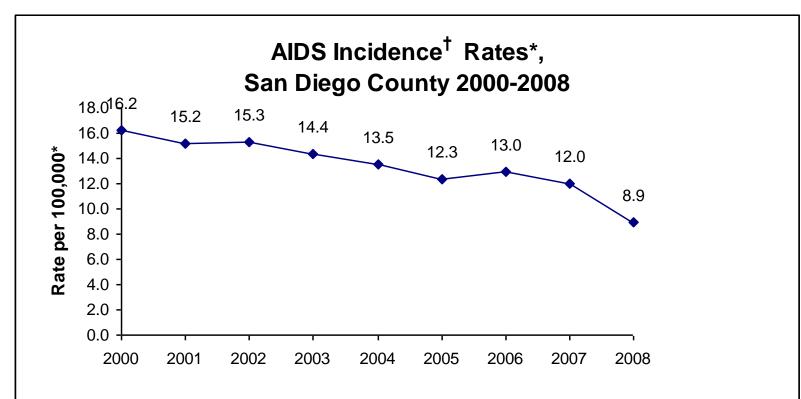


Note: Changes in rates for HIV are primarily due to changes in HIV reporting. HIV reporting by non-name code began in a pilot in 2001 but they are only included here if the case was reascertained to add name via a confirmed antibody test or viral load test collected after April 16, 2006. Date of report reflects a new case for the local health jurisdiction, not necessarily the first HIV positive test for that case.

*Ratesper 100,000 population. Note: Annual fluctuation in numbers and rates are likely an artifact of reporting, not actual variations.
†HIVRates refer to name-based reports to CoSDPHS, beginning 4/17/2006. Report date may not reflect the first HIV positive test for that case.
Source: County of San Diego, Health & Human Services Agency, HIV/AIDS Epidemiology Unit, HIV/AIDS Reporting System; SANDAG, Current Population Estimates, 4/24/2009. Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 5/28/2010.



Local Statistics



^{*} Rates per 100,000 population.

Source: County of San Diego, Health & Human Services Agency, HIV/AIDS Epidemiology Unit, HIV/AIDS Reporting System; SANDAG, Current Population Estimates, 4/24/2009.

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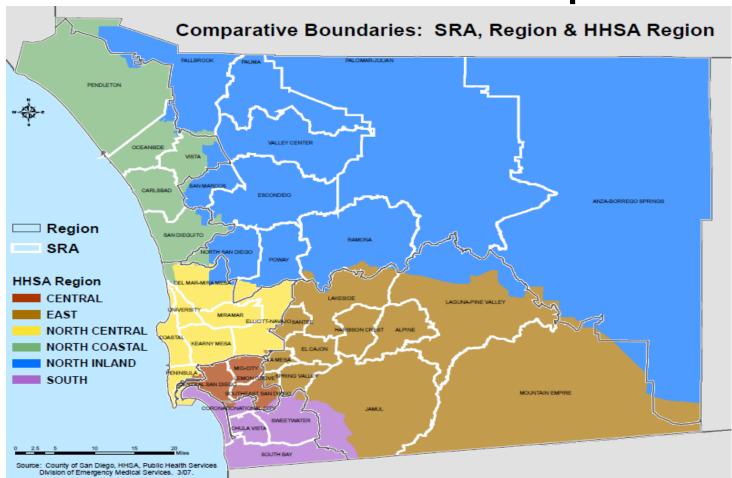
 $[\]dagger\,\text{AIDS}$ incidence refers to new cases reported to County Public Health Services.

Local Statistics and Disparities

- Of the new HIV infections reported between April 17, 2006 and December 31, 2008, 90% of the cases were males.
- In 2008, the rate of newly diagnosed AIDS cases among Blacks was nearly 3 times the rate for Whites in San Diego County.
- In 2008, the rate of newly diagnosed AIDS cases among Hispanics was higher than the rate for Whites in San Diego County.



Local Statistics and Disparities



From 2000 to 2008, the Central region had the highest rates of HIV infections in all of San Diego County.



Prevention

- Safer Sex Practices
 - Use condoms to reduce HIV transmission.
 - When used correctly, condoms can be 98% effective in preventing the transmission of HIV1.
- Do not share needles or syringes with others.
- Seek prenatal treatment of you are pregnant.
 - There are medications available that can greatly reduce the chance of transmitting the HIV virus to the baby.



Prevention

Seek treatment for STDs

 Treatment of STDs reduces the risk of transmitting or becoming infected with HIV.

Get an HIV test

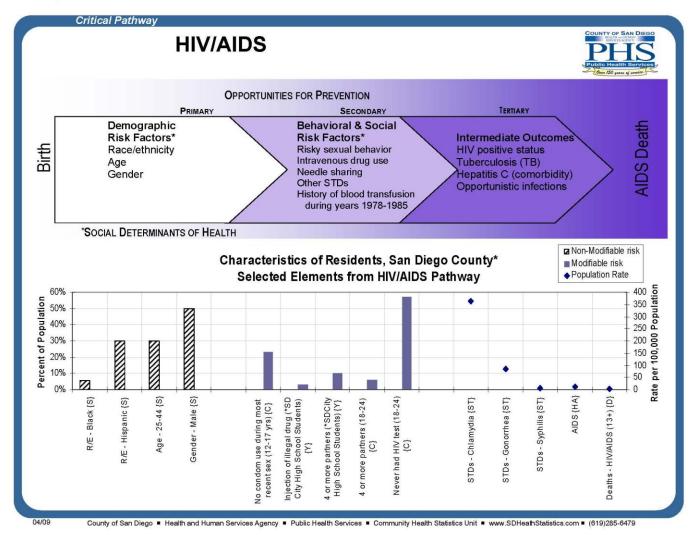
 Early testing and intervention can help prevent the spread and progression of the disease.

About 21% of those infected do not know they have HIV.





Critical Pathway to HIV/AIDS





Contact Us

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